

**PA1186**

**800-960 MHz.**

**6 Watt**

**28v. GaAs Ultra Linear Power Amplifier**

**tyco**

*Electronics*

**M/A-COM**

**Features (typical values)**

**High IP3** ..... +56.0 dBm.

**Low NF** ..... 2.4 dB.

**High Output Power** ..... +38 dBm.

**Low Cost**

Parameter	Typical Value	Min. Value	Max. Value	Units
Frequency		800	960	MHz.
Gain	29.0	27.0		dB.
Gain Flatness	+/- 0.3			±dB.
Pout @ 1dB. comp.	38.0	36.0		dBm.
Noise Figure	2.4		3.5	dB.
ACPR (30kHz. BW)*	-50.0			dBc.
VSWR (Input/Output)	1.5:1/2:1		2:1/2.5:1	
IP3 (two tone)**	+56.0	+50.0		dBm.
Supply Required***	+28/1000		+28/1200	v./mA.

\* ±850kHz from fc at power level of 30dBm. (IS-95)

\*\* IP3 measured with 2 tones @+25dBm. per tone @ 1MHz apart

\*\*\* A 10 micro farad capacitor is required from pin 3 (+V) to ground  
Min and max values from 0 to 85 degrees C

**Outline Drawings**

See Attached Document

**Maximum Ratings**

Storage Temperature ..... -40°C to +125°C

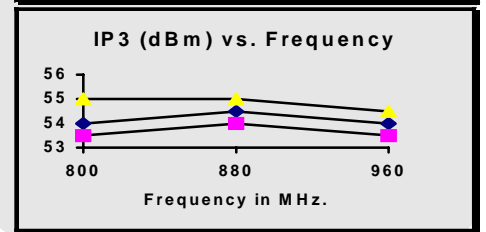
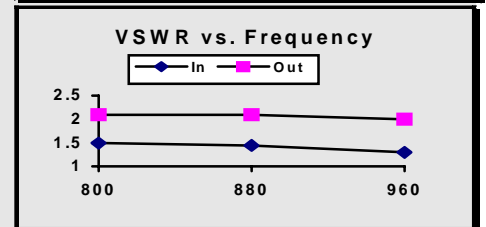
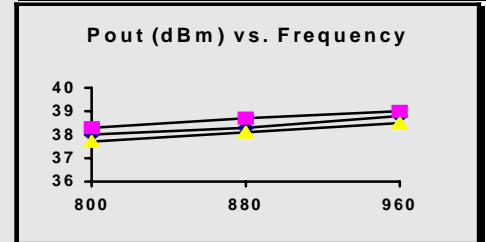
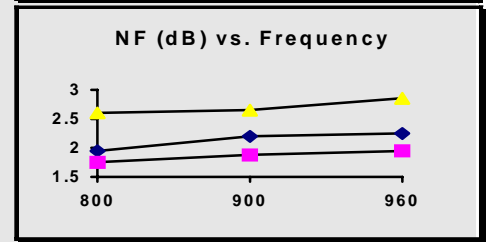
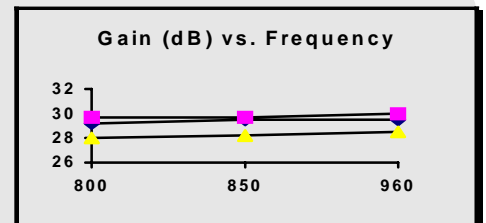
DC Voltage ..... +30 volts

RF Input Power ..... +15 dBm.

Case Temperature ..... +90°C

**Typical Performance**

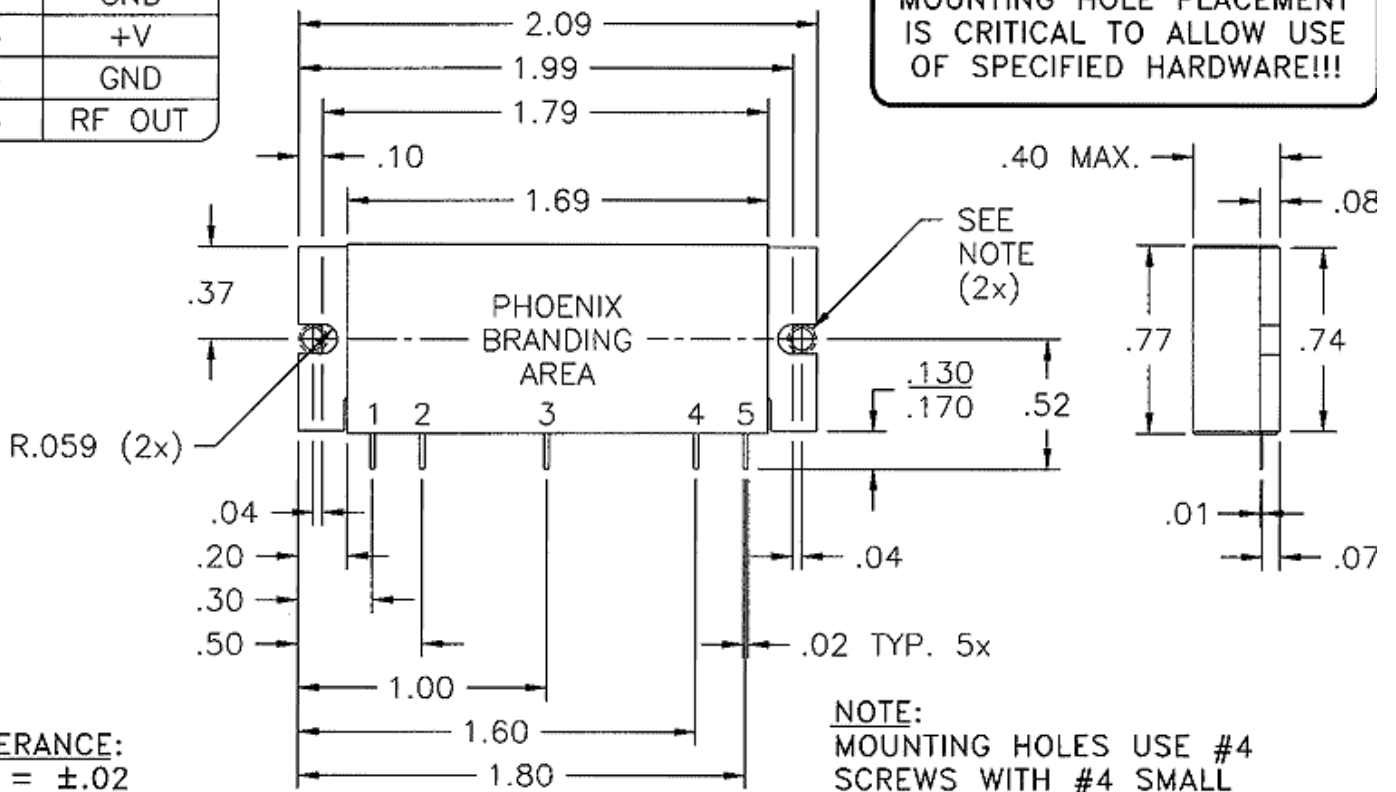
--◆-- 0°C --■-- +25°C --▲-- +75°C



# OUTLINE DRAWING

PIN	FUNCTION
1	RF IN
2	GND
3	+V
4	GND
5	RF OUT

**IMPORTANT!**  
MOUNTING HOLE PLACEMENT IS CRITICAL TO ALLOW USE OF SPECIFIED HARDWARE!!!



**TOLERANCE:**  
.XX =  $\pm 0.02$   
.XXX =  $\pm 0.010$

**NOTE:**  
MOUNTING HOLES USE #4  
SCREWS WITH #4 SMALL  
PATTERN FLAT & LOCK WASHERS.